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EXAMINER

FLANDERS, ANDREW C

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/659,693	Applicant(s) SUTARDJA, SEHAT	
	Examiner ANDREW C. FLANDERS	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 173-190 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/18/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 18 December 2009 have been fully considered but they are not persuasive.

In response to section A of Applicant's arguments, namely that a number of compression standards were available, and it would be desirable to have a single device...rather than a purchase a number of devices, Examiner respectfully disagrees.

Although not believed to be necessary, since Yanigahara clearly shows a number of compression standards being used by a device for decompression, and it is clearly desirable to have a single device to decompress multiple types of compression, as is taught by Yanigihara, Examiner presents Abecassis (U.S. 6,192,340) as further evidence that media players such as portable players are known to decompress a plurality of compression technologies (col. 13 lines 10 – 15). While not explicitly stated, Examiner maintains the purpose for this being compatibly among the diverse and numerous types of compression readily available at the time of the claimed invention. Thus, rather than having to buy numerous devices to reproduce each type of compression, a single device can be used.

Further, it should be noted, that while Birrell is silent as to the number of compression techniques used throughout the specification, it is likely that Birrell anticipates a number of compression techniques to be decompressed. Throughout the specification, Birrell refers to the MP3 standard in example form only, and discusses

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compression and decompression in generic terms. Additionally, because Birrell retrieves a decompression procedure, it is likely that multiple exist for the multiple types of compression techniques known.

Applicant further alleges in section B:

Yanagihara is completely absent of any teaching or suggestion of determining a compression format of the compressed media data after the compressed media data is retrieved from the storage device and retrieving a selected one of the plurality of processes in response to determining the compression format.

Accordingly, Yanagihara discloses receiving control data along with the compressed media data, not determining the compression format of the compressed media data. Further, Yanagihara discloses setting decoder parameters based on the received control data, not selecting a particular process of a plurality of processes and retrieving the process from a storage device.

Examiner disagrees. Yanagihara reads these decoder parameters via the control data; this, in itself is a method of "determination."

In response to Applicant's argument's in section C, Applicant alleges that all claim limitations are not taught, but does not give specific limitations that are not met by the art. As a result, the arguments in section C are moot.

In response to Applicants arguments regarding claim 175, In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

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combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 173 – 175, 178, 182 – 184 and 187 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birrell (U.S. Patent 6,332,175) in view of Yanagihara (U.S. Patent 6,233,393).

Regarding **Claim 173**, Birrell discloses:

A media device comprising:

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a memory (108 or 112);

a storage device to store compressed media data, the compressed media data having a compression format (hard disk 104); and

a process configured to decompress compressed media data (decompression procedure 168).

Birrell does not explicitly disclose storing the process on the storage device as claimed. However, Examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time of the invention to store the procedures in the storage device instead of in the ROM. Both the ROM and the disk are non-volatile memory devices and therefore are suitable to store system procedure programs. It would be an obvious variation to store the programs in the disk instead of the ROM. One would have been motivated to do so in order to manufacture the Birrell player with less parts and thus making it less costly as the ROM would not be required if the programs were stored instead on the disk.

Birrell further discloses:

a programmable processor (CPU 102) configured to be programmed

as a storage controller to retrieve the compressed media data from the storage device (i.e. the system contains multiple control programs executed by the data processor, on being a play procedure; Fig. 1 element 102 and col. 5 lines 5 – 33; the play control logic, which is part of the play procedure as shown in Fig. 2, transfers data from the disk to RAM; col. 6 lines 14 – 16); and

as a digital signal processor to decompress the compressed media data (i.e. the system contains multiple control programs executed by the data processor, one being a decompression procedure; col. 5).

Birrell does not explicitly disclose:

a plurality of processes to decompress the media data.

However, at the time the invention was made, Examiner takes official notice that a number of compression standards were available similar to the MP3 standard. It would have been obvious to one of ordinary skill in the art to add decompression procedures for each of these standards in the Birrell device. It would be desirable to have a single device for decompression a number of compression procedures known in the art rather than having to purchase a number of devices to perform the same task.

Further, Birrell does not explicitly disclose:

wherein the programmable processor is further configured to
determine the compression format of the compressed media data;
select a first process of the plurality of processes stored in the storage device
based on the compression format of the compressed media data; and
decompress the compressed media data based on the first process; and
an output device to output the decompressed media data from the media device.

Yanagihara discloses a device with a general controller that determines the compression of audio data and sets the decoder to decompress the given compression;
Fig. 15.

Applying this to Birrell's device discloses:

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wherein the programmable processor (Birrell's 102) is further configured to determine the compression format of the compressed media data (Birrell's processor 102 configured like the general purpose processor of Yanagihara to determine the compression);

select a first process of the plurality of processes stored in the storage device based on the compression format of the compressed media data (retrieving the decompression procedure stored in Birrell to set the decoder as taught by Yanagihara); and

decompress the compressed media data based on the first process (i.e. decompress via CPU 102); and

an output device to output the decompressed media data from the media device (130).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the compression determination technique taught by Yanagihara to the device taught by Birrell. Doing so would be nothing more than applying a known technique (i.e. decompressing audio data of multiple types via a single processor) to a known device (i.e. Birrell's CPU) ready for improvement to yield predictable results (i.e. Birrell's device can be adapted to decompress multiple compression types).

As further evidence these features are obvious and would lead to predictable results, see Du (U.S. 7,444,439) which teaches a portable player with a decoder 58, that receives audio data and decodes the data according to a stored decoder algorithm.

Additionally, the algorithm can be stored in flash memory and loaded as needed.

Further, the decoder can be updated or modified; see col. 5 lines 20 - 47.

Regarding **Claim 174**, in addition to the elements stated above regarding claim 173, the combination further discloses:

wherein the digital signal processor includes a decoder to decompress the compressed media data (i.e. the processor includes a decompression procedure for decompressing compressed audio files; col. 5 lines 20 – 25).

Regarding **Claim 175**, in addition to the elements stated above regarding claim 173, the combination further discloses:

the compressed media data includes a plurality of media selections (i.e. media files on disk 104);

the programmable processor transfers first portions of at least one of the plurality of media selections from the storage device to the memory (i.e. the system contains multiple control programs executed by the data processor, on being a play procedure; Fig. 1 element 102 and col. 5 lines 5 – 33; the play control logic, which is part of the play procedure as shown in Fig. 2, transfers data from the disk to RAM; col. 6 lines 14 – 16; the play control logic maintains sufficient portions of data in the RAM to ensure that there is no break in the playback; col. 6 lines 5 – 28);

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the output device outputs the first portions from the media device (i.e. as the audio data is played back, the portions present in RAM are read out to the audio out jack; col. 6 lines 5 – 28);

a user selects a particular one of the plurality of media selections in response to the first portions (i.e. navigation of the playlist, fwd, rev, etc; see below); the programmable processor retrieves a remaining portion of the particular one of the plurality of media selections in response to the user selection (i.e. next would retrieve the next song, continuing playback w/ no input would continue retrieving the current song; see below); and the output device outputs the remaining portion of the particular one of the plurality of media selections (i.e. user selections are added to a play list, which is a queue of tracks to be played by the system; col. 5 lines 1 – 3 and as the audio data is played back, the portions present in RAM are read out to the audio out jack; col. 6 lines 5 – 28).

Regarding **Claim 178**, in addition to the elements stated above regarding claim 173, the combination further discloses:

wherein the processor includes a single integrated circuit, the single integrated circuit comprising:

the programmable processor (i.e. CPU 102 is a general purpose processor); and

a read channel hat is responsive to the storage controller to read data from the storage device (i.e. any of the inputs to CPU 102 that reads commands or inputs data for playback/retrieval).

Claims 182 – 184 and 187 are rejected under the same grounds stated above.

Claims 179 – 181 and 188 – 190 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birrell (U.S. Patent 6,332,175) in view of Yanagihara (U.S. Patent 6,233,393)in further view of Terui (U.S. Patent 5,903,871).

Regarding **Claim 179**, in addition to the elements stated above regarding claim 173, the combination fails to explicitly disclose:

an input circuit to receive media data, wherein the digital signal processor compresses the received media data.

Terui discloses:

an input circuit to receive media data, (i.e. a microphone for converting voice to an electric signal and an analog to digital converter for converting it to a digital signal; col. 3 lines 4 – 12);

wherein the digital signal processor compresses the received media data. (i.e. the digital signal is compressively transformed; col. 3 lines 25 – 29).

It would have been obvious to one of ordinary skill in the art to add the features of Terui to the elements of the combination in order to integrate a portable voice recorder into Birrell's portable player. One would have been motivated to do so in order

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to enhance the operation of the player to provide a voice recording and reproducing apparatus which can easily store and manage a voice file (Terui col. 1 lines 48 - 50) thus eliminating the need for multiple devices to perform similar tasks.

Regarding **Claim 180**, in addition to the elements stated above regarding claim 179, the combination further discloses:

wherein the digital signal processor includes an encoder to compress the received media data (i.e. the digital signal is compressively transformed; col. 3 lines 25 – 29).

Regarding **Claim 181**, in addition to the elements stated above regarding claim 179, the combination further discloses:

wherein the storage device stores a plurality of compression processes (see above rejections) and the digital signal processor compresses the received media data based on a selected one of the plurality of compression processes (compressively transforming the input audio based on one of the compression procedures).

Claims 188 - 190 are rejected under the same grounds stated above.

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Claims 173, 174, 182 and 183 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du (U.S. Patent 7,444,439) in view of Yanagihara (U.S. Patent 6,233,393).

Regarding **Claim 173**, Du discloses:

A media device comprising:

a memory (52);

a storage device to store compressed media data, the compressed media data having a compression format (HDD 20); and

a process configured to decompress compressed media data (i.e. decoder algorithm; Col. 5).

Du does not explicitly disclose storing the process on the storage device as claimed. However, Examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time of the invention to store the decoder algorithms in the storage device instead of in the Flash memory. Both the Flash memory and the disk are non-volatile memory devices and therefore are suitable to store system decoder algorithms. It would be an obvious variation to store the algorithms on the disk instead of the flash memory. One would have been motivated to do so in order to manufacture the Du player with less parts and thus making it less costly as the ROM would not be required if the programs were stored instead on the disk.

Du further discloses:

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a programmable processor configured to be programmed as a storage controller to retrieve the compressed media data from the storage device (MP3 controller includes processor 48 which loads MP3 files from the disk into memory 50; Fig. 4); and

as a digital signal processor to decompress the compressed media data (decoder circuitry 56).

Du fails to explicitly disclose:

a plurality of processes to decompress the media data.

However, at the time the invention was made, Examiner takes official notice that a number of compression standards were available similar to the MP3 standard. It would have been obvious to one of ordinary skill in the art to add decompression procedures for each of these standards in the Birrell device. It would be desirable to have a single device for decompression a number of compression procedures known in the art rather than having to purchase a number of devices to perform the same task.

Further, Du explicitly notes that the controller is not limited to only MP3 decompression and can be modified to decompress any compressed audio type; last para in col. 6 to top of col. 7. Given that Du discloses retrieving a decoder algorithm from memory, and that the controller can be modified to decompress any type of compression, modifying the device to store numerous algorithms for multiple compression types would have been nothing more than applying a known technique to a known device yielding predictable results.

Further, Du fails to explicitly disclose:

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wherein the programmable processor is further configured to determine the compression format of the compressed media data;

select a first process of the plurality of processes stored in the storage device based on the compression format of the compressed media data; and

decompress the compressed media data based on the first process; and

an output device to output the decompressed media data from the media device.

Yanagihara discloses a device with a general controller that determines the compression of audio data and sets the decoder to decompress the given compression;

Fig. 15.

Applying this to Du's device discloses:

wherein the programmable processor is further configured to determine the compression format of the compressed media data (i.e. determining the compression as taught by Yanagihara in order to load the proper decoder algorithm in Du);

select a first process of the plurality of processes stored in the storage device based on the compression format of the compressed media data (retrieving the decoder algorithm stored in Du to set the decoder as taught by Yanagihara); and

decompress the compressed media data based on the first process (i.e. decompress via 56); and

an output device to output the decompressed media data from the media device (any of the outputs in Fig. 4).

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the compression determination technique taught by Yanagihara to the device taught by Du. Given that Du can be adapted to be able to decode multiple compression types, it would be necessary to determine which compression is present in order to decode properly. Thus, doing so would be nothing more than applying a known technique (i.e. decompressing audio data of multiple types via a single processor) to a known device ready for improvement to yield predictable results.

Regarding **Claim 174**, in addition to the elements stated above regarding claim 173, the combination further discloses:

wherein the digital signal processor includes a decoder to decompress the compressed media data (decoder 58 also 56).

Claims 182 and 183 are rejected under the same grounds stated above.

Claims 175 – 177 and 184 – 186 are rejected under 35 U.S.C. 103(a) as being unpatentable over Du (U.S. Patent 7,444,439) in view of Yanagihara (U.S. Patent 6,233,393) and in further view of Berman (U.S. Patent 6,502,194).

Regarding **Claim 175**, in addition to the elements stated above regarding claim 173, the combination further discloses:

the compressed media data includes a plurality of media selections (i.e. audio files on HDD 20).

The combination fails to explicitly disclose:

the programmable processor transfers first portions of at least one of the plurality of media selections from the storage device to the memory;

the output device outputs the first portions from the media device;

a user selects a particular one of the plurality of media selections in response to the first portions;

the programmable processor retrieves a remaining portion of the particular one of the plurality of media selections in response to the user; and

the output device outputs the remaining portion of the particular one of the plurality of media.

Berman discloses a preview device that plays compressed audio files on a computing device (akin to the Laptop of Du); Figs. 1, 11 and 12.

Applying Berman previewing technique to the laptop computer of Du discloses:

the programmable processor transfers first portions of at least one of the plurality of media selections from the storage device to the memory (loading from HDD 20 in Du into the buffer, now modified by Berman to load multiple preview clips into a buffer; see Figs. 11 and 12);

the output device outputs the first portions from the media device (i.e. playback via outputs in Fig. 4 of Du);

a user selects a particular one of the plurality of media selections in response to the first portions (user can select playback as taught by Du, of one of the segments loaded into the staging memory as taught by Berman);

the programmable processor retrieves a remaining portion of the particular one of the plurality of media selections in response to the user (playback when a new track is selected, Fig. 5 of Berman; buffer selected has priority over all buffers, data flow into this buffer is maintained such that continuous playback is guaranteed); and

the output device outputs the remaining portion of the particular one of the plurality of media (i.e. playback via outputs in Fig. 4 of Du).

It would have been obvious to one of ordinary skill in the art to apply the buffering/previewing of Berman to the buffer of Du. Doing so would have been nothing more than applying a known technique (i.e. buffering of multiple songs) to a known device (i.e. media player of Du) ready for improvement to yield predictable results.

Regarding **Claim 176**, in addition to the elements stated above regarding claim 175, the combination further discloses:

the programmable processor retrieves the remaining portion if the user selects (skip/play or another user input) the particular one of the plurality of media selections within a predetermined period (10 seconds pre-buffered) after the output device outputs one of the first portions corresponding to the particular one (i.e. playback is

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initiated/another song is skipped to before the 10 seconds of audio data in the buffer is consumed; the buffer selected has priority over all buffers, data flow into this buffer is maintained such that continuous playback is guaranteed; see Memory Buffering control section in Col. 11 and 12).

Regarding **Claim 177**, in addition to the elements stated above regarding claim 173, the combination further discloses:

Wherein the output device continues the outputting of the first portions if the user does not select the particular one within the predetermined period (data flow into the current buffer is maintained such that continuous playback is guaranteed if no command is given; see Memory Buffering control section in Col. 11 and 12).

Claims 184 - 186 are rejected under the same grounds stated above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW C. FLANDERS whose telephone number is (571)272-7516. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Flanders/
Primary Examiner, Art Unit 2614